GT804M

USER MANUAL

4 CHANNEL

DIGITAL VIDEO RECORDER

INSTRUCTION MANUAL

To obtain the best performance and ensure device function correctly, please read this instruction manual carefully and completely.

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FCC Compliance

USER-INSTALLER CAUTION: YOUR AUTHORITY TO OPERATE THIS FCC VERIFIED EQUIPMENT COULD BE VOIDED IF YOU MAKE CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE TO PART 15 OF THE FCC RULES.

NOTE: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

THIS CLASS A DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

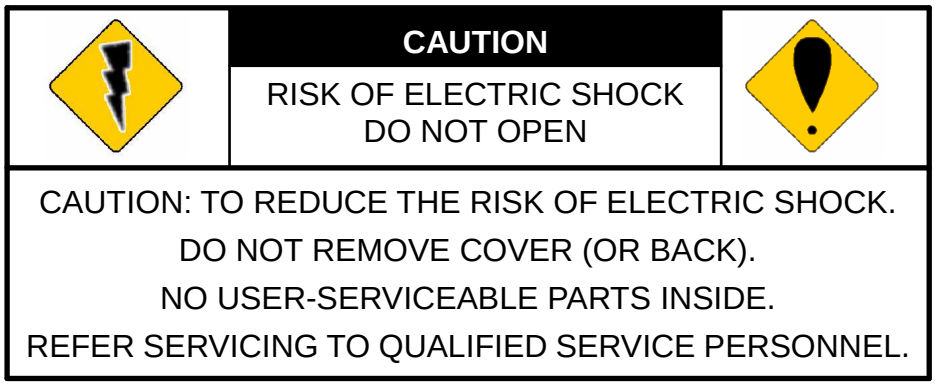
WARNINGS, CAUTIONS & COPYRIGHT

WARINGS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation of Graphical Symbols

	The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insinuated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral rhombus is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

USERS OF THE SYSTEM ARE RESPONSIBLE FOR CHECKING AND COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND STATUTES COIPCERNING THE MONITORING AND RECORDING OF VIDEO AND AUDIO SIGNALS. ULTRAK SHALL NOT BE HELD RESPONSIBLE FOR THE USE OF THIS SYSTEM IN VIOLATION OF CURRENT LAWS AND STATUTES.

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1 INTRODUCTION

1.1 FEATURE

- MPEG-4 Video Compression.
- Resolution: Real-time 720×480 (NTSC)/ 720×576 (PAL)
  Recording 720x240 (NTSC)/ 720x288 (PAL)
- Audio Backup / Audio Streaming.
- Internal SATA Hard Disk Support.
- Graphic User Interface (GUI).
- Mouse/ IR Remote Controller Support.
- USB Back Up/ Firmware Update
- Compact Size, Easy Space Arrangement
- Support Smart Phone and PDA.

1.2 SPECIFICATION

VIDEO		
MODE	Triplex	
IMAGE SYSTEM	NTSC	PAL
LIVE-TIME RESOLUTION	720×480	720×576
LIVE-TIME DISPLAY RATE	4 × 30 Frame / Sec	4 × 25 Frame / Sec
SPLIT SCREEN	1, 4	
VIDEO INPUT	BNC × 4	
VIDEO LOOPING	No	
VIDEO OUTPUT (BNC)	BNC × 1	
VIDEO OUTPUT (VGA)	Yes (Option)	
AUDIO		
AUDIO INPUT	RCA × 1	
AUDIO OUTPUT	RCA × 1	
AUDIO BACKUP	Yes	
AUDIO STREAMING	Yes	
RECORDING		
COMPRESSION TYPE	MPEG-4	
RECORDING RESOLUTION	720×240, 360x240	720×288, 360x288
RECORDING RATE (CIF)	360 x 240 up to 120 PPS	360 x 288 up to 100 PPS
RECORDING RATE (FIELD)	720 x 240 up to 30 PPS	720 x 288 up to 25 PPS

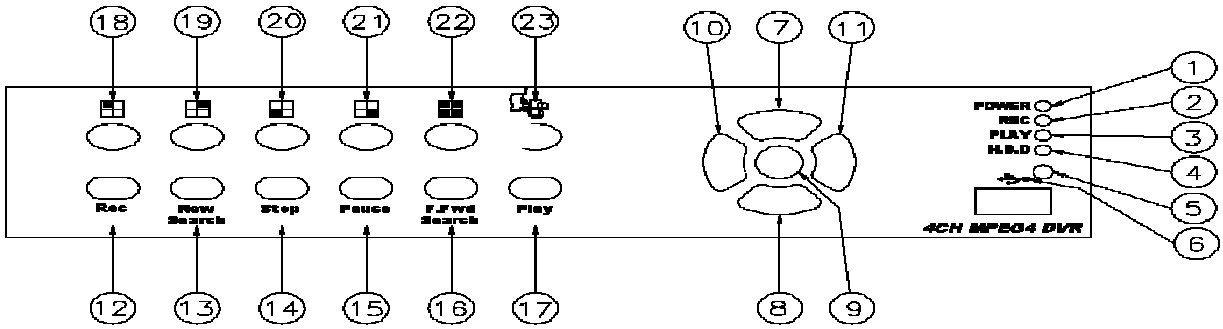
COMPRESSION RATE	Low ：2K Bytes Medium ：4.2K Bytes High ：6.2K Bytes Best ：8K Bytes
RECORDING MODE	12 Manual / Schedule
PLAYBACK & SEARCH	
PLAYBACK SPEED	Fast Forward X 2 X 8 X 16 X32 X64 Fast Backward X32 field by field Playback Pause Slow Motion Playback X1/2 X1/4
TIME SEARCH	Yes
EVENT SEARCH	Yes
EVENT LIST	3000 records per H.D.D (Maximum)
OSD & CONTROL INTERFACE	
TITLE	8 Characters
ON SCREEN DISPLAY & SETUP	Time / Date / Setup Menu
GRAPHIC USER INTERFACE (GUI)	Yes
DVR CONTROL PANEL	Yes
MOUSE	Yes (Option)
IR REMOTE CONTROLLER	Yes (Option)
IE BROWSER	Yes
PLAYER	F4 Viewer
STORAGE & BACKUP DEVICE	
INTERNAL HDD SUPPORT	SATA HDD x 1
USB BACKUP	Yes
NETWORK	
ETHERNET	Yes
ETHERNET COMPRESSION FORMAT	MPEG-4
DDNS	Yes
E-MAIL & FTP	Yes
NETWORK IP	Static/ Dynamic/ PPPoE
MULTI-REMOTE CLIENT	Yes (5 Clients at the same time available)
PDA/ CELL PHONE SUPPORT	Yes
ALARM	
MOTION DETECTION	Yes
MOTION DETECTION AREA	30 x 24 grids
MOTION DETECTION SENSITIVITY	1-100
VIDEO LOSS DETECTION	Yes

ALARM RECORDING	Yes
BUZZER	Yes
SETUP & OTHER FUNCTIONS	
PASSWORD CONTROL	Two levels, one for system and the other for HDD format
KEY-LOCK	Yes
MULTI-LANGUAGE	Yes
FIRMWARE UPDATE	USB Host
OTHERS	
POWER INPUT	DC 12V
POWER CONSUMPTION (W)	17W
DIMENSIONS (W x H x D)	218mm (W) × 44mm (H) × 202mm (D)
WEIGHT (kg)	1.4kg
OPERATION TEMPERATURE	0 - 45 ℃

ATTENTION：A. PLEASE format the hard disk before changing the recording resolution.
Different record resolution cannot be stored in the same hard disk.
Failing to do so may cause data lost or hard disk damage!!
B. DVR needs to STOP recording before processing USB backup function.
C. DVR needs to STOP recording before processing USB firmware update function.
D. DVR system will reboot after changing recording quality setup.

2 HARDWARE OVERVIEW

2.1 FRONT PANEL



DVR OPERATION

NO.	ITEM	DVR Function
1	POWER	Power status LED.
2	REC	Recording status LED.
3	PLAY	Playback status LED.
4	H.D.D	H.D.D. LED.
5	O	IR Sensor for remote control.
6		USB connector.
7	▲	Move upward or increase the number.
8	▼	Move downward or decrease the number.
9	MENU	Press MENU to enter or exit MENU.
10	◄	Move leftward or decrease the number.
11	►	Move rightward or increase the number.
12	REC	Recording button.
13	Rew search	Fast Backward x 32.
14	STOP	Press STOP to stop playback or recording.
15	Pause	Pause & Field by Field Forward.

16	F.Fwd	Fast Forward ×2, ×8, ×16, x32, ×64.
17	PLAY	PLAY button & Get into Quick Time Search.
18	1	Channel One Full Screen & Number: One.
19	2	Channel Two Full Screen & Number: Two.
20	3	Channel Three Full Screen & Number: Three.
21	4	Channel Four Full Screen & Number: Four.
22	Quad	Quad screen: All cameras are displayed.
23		Confirmation and Backup.

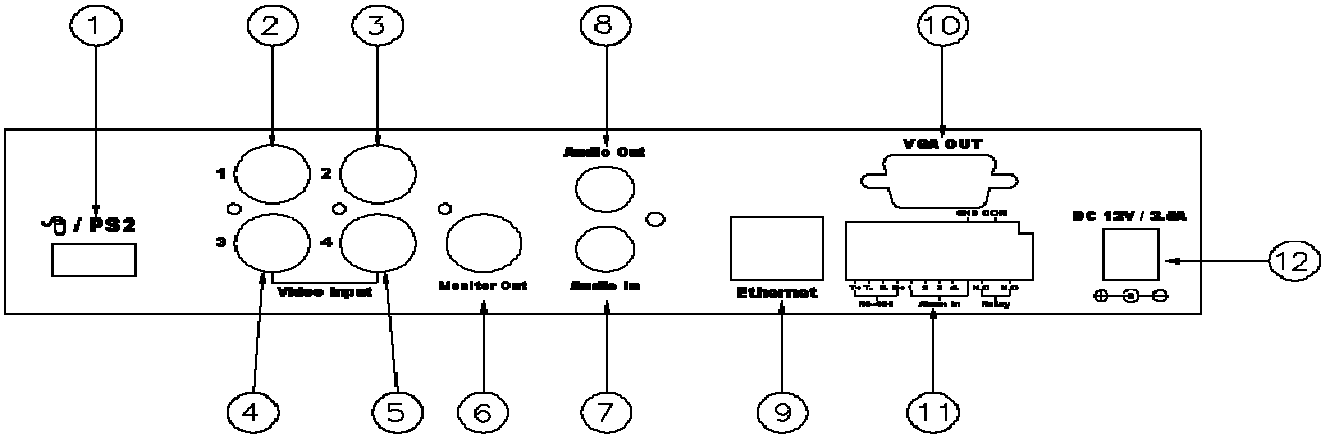
FRONT PANEL KEY COMBINATION

Auto Swap：Press “Quad”, then press “>>” within 5 seconds.

Zoom Function：Press”Enter” while in the single channel mode.

HDD Information：Press ”Enter” while in the Quad mode.

2.2 BACK PANEL



NO.	ITEM	FUNCTION
1	MOUSE	Mouse interface.
2	CAMERA IN	Camera 1 video input with BNC connector.
3	CAMERA IN	Camera 2 video input with BNC connector.
4	CAMERA IN	Camera 3 video input with BNC connector.
5	CAMERA IN	Camera 4 video input with BNC connector.
6	MONITOR OUT	Video output with monitor
7	Audio IN	Audio input.
8	Audio OUT	Audio output.
9	Ethernet	RJ-45 Ethernet network interface.
10	VGA OUT D-SUB	Reserved.
11	RS-485	Reserved.
	ALARM IN	Reserved.
	Relay Out	Reserved.
12	Power	DC 12V /3A.

2.3 EXTERNAL ALARM(reserved)

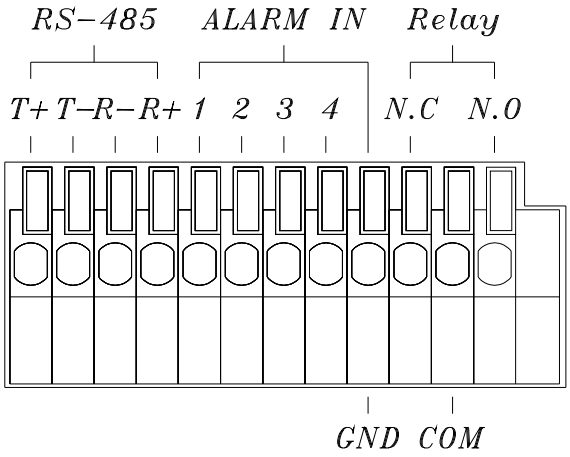
There are three types of alarms that the system can be configured, such as Motion Detection Alarm, External Alarm, and Video Loss Alarm.

Motion Detection Alarm and External Alarm：

When Motion Detection or External Alarm was triggered, there are 5 possible actions will be taken.

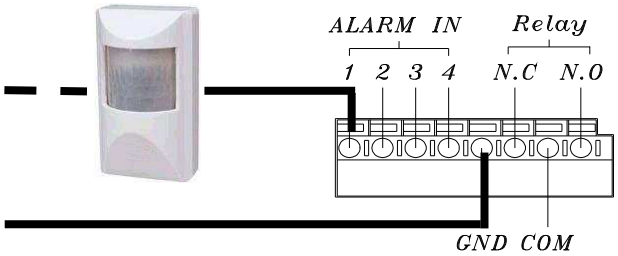
a. Recording speed changed from normal to alarm recording.
b. If Alarm Display Mode of Alarm Setup is ON, when the alarm is triggered, the corresponding full screen alarm channel will be displayed automatically; however, if the alarm is triggered and the setup is done within five seconds, the corresponding full screen alarm channel won't be displayed.
c. It's optional to activate Relay.
d. Motion Detection and External Alarm both will be recorded in the event list. In Motion Detection Record of Alarm Setup, the user can set up ON or OFF to record the motion event or not.
e. When Motion Detection was triggered, the color of camera title will be transformed into yellow. In addition, when External Alarm was triggered, "ALARM" text will be displayed on the screen.

Terminal Connectors：

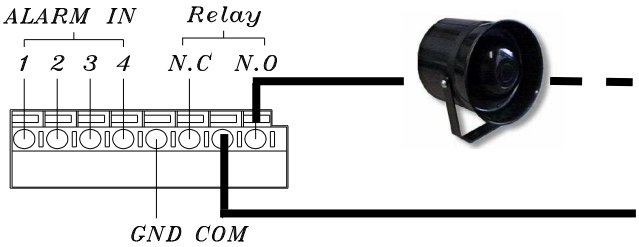


T+	RS-485 sends +
T -	RS-485 sends -
R-	RS-485 receives -
R+	RS-485 receives +
ALARM1-4	Camera alarm input.
GND	GND.
N.C	Relay N.C.
COM	Relay COM
N.O	Relay N.O.

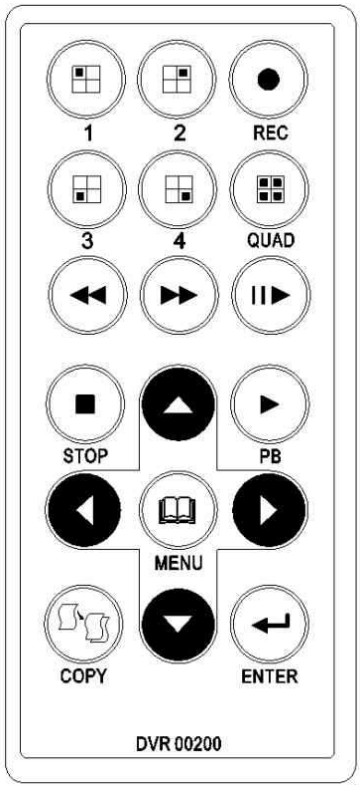
EXAMPLE 1：Connect Alarm In One with PIR (Passive Infrared).



EXAMPLE 2：Connect with Alarm Siren at Relay N.O.



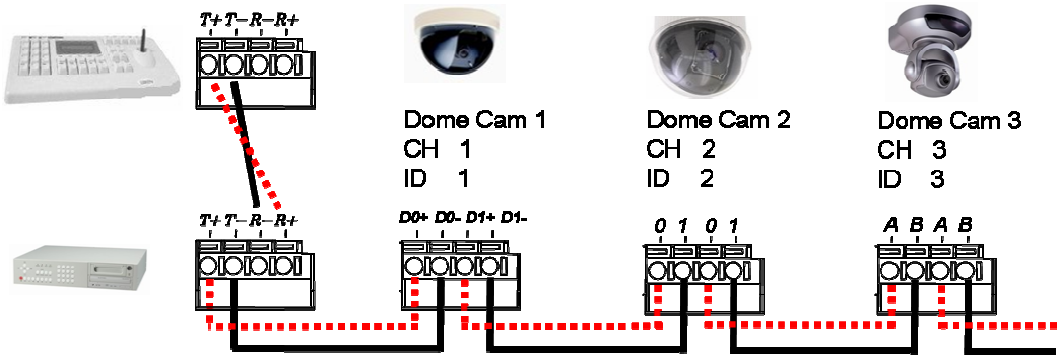
2.4 IR REMOTE CONTROL(Optional)



ITEM	
REC	Press REC to start recording and press twice to stop.
1 - 4	Select channel 1-4 with full screen.
QUAD	Fast backward.
◀◀	Picture by picture backward.
▶|	Picture by picture forward.
▶▶	Fast Forward.
▶	Play video forward.
COPY	Switch channel format.
▲	Move upward or increase the number.
►	Move rightward or increase the number.
▼	Move downward or decrease the number.
◄	Move leftward or decrease the number.
↵	Enter selected items.
MENU	Enter or Exit Main Menu.
STOP	Stop the playback.

2.5 RS-485 CONTROLLER (reserved)

	PIN	DEFINE
RS-485	R+	RXDA
	R-	RXDB
	T+	TXDZ
	T-	TXDY



Data Format：

Data: 1 Byte / Parity: None / Start bit: 1 / Baud: 9600

Totally 3 bytes as follows:

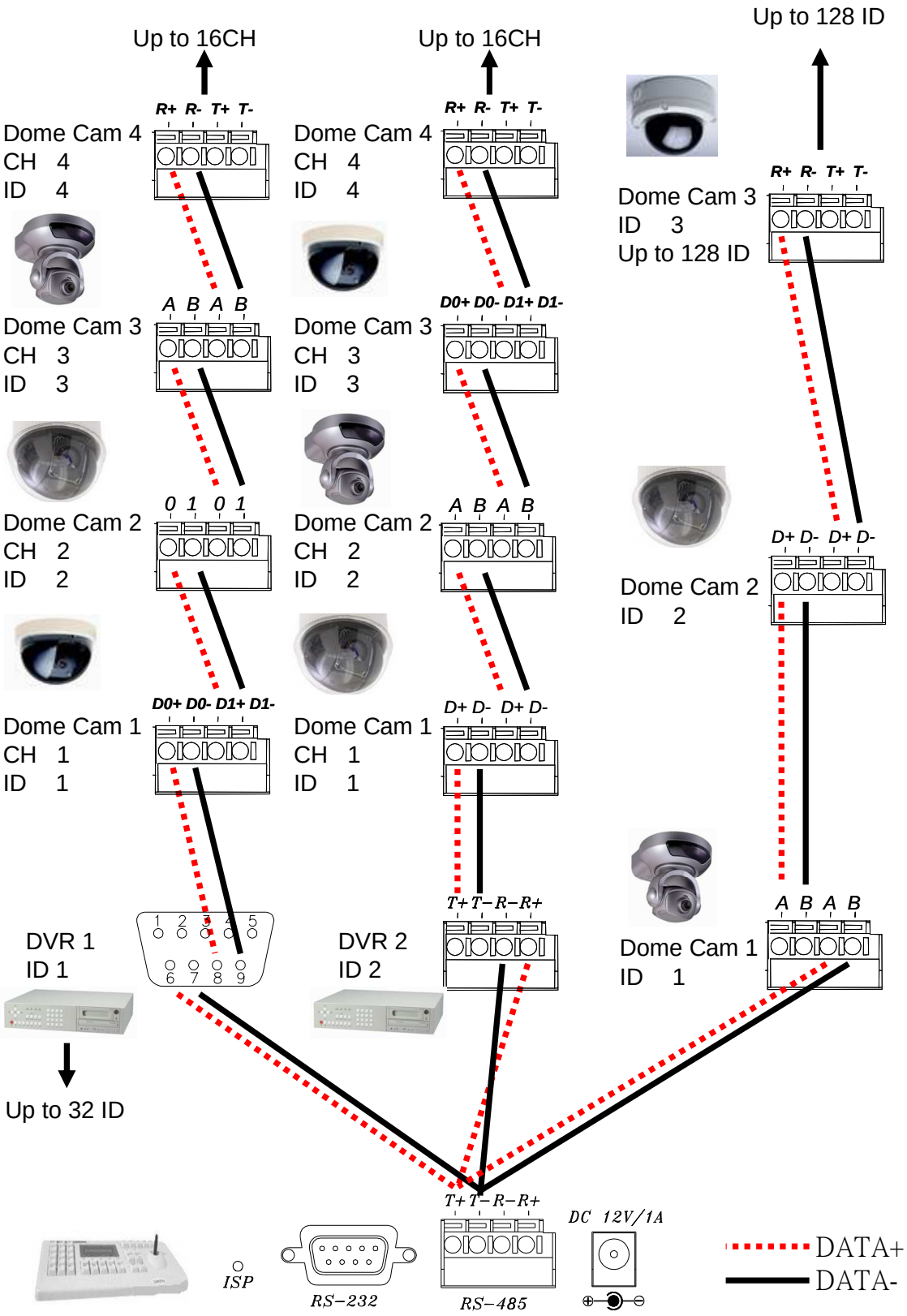
1. Byte=0x10 ：Broadcasting DVR
   Byte=0x80+ID Number ：Joystick Control DVR (ID number:1~32)
2. Byte=Reference to the table as follows. ：Commands of each button.
3. Byte= the 1st Byte+ the 2nd Byte **:** Command for confirm checksum.

4-ch DVR	Command		4-ch DVR	Command
CH1	0x11		PLAY	0x52
CH2	0x12		UP	0x31
CH3	0x13		DOWN	0x32
CH4	0x14		MENU	0x20
QUAD	0x15		LEFT	0x33
RFAST	0x3A		RIGHT	0x34
STOP	0x51		SELECT	0x35
PAUSE	0x3D		ENTER	0x35
FFAST	0x3E			

2.6 PTZ (PAN, TILT AND ZOOM) CAMERA & JOYSTICK CONTROLLER (reserved)

The following diagram is for DVR connect PTZ camera with joystick controllers. Make sure CAMERA ID, BAUD RATE (default at 9600 bps) and RS-485 +/-. If the

user wants to connect DVR with joystick controllers, please make sure each DVR ID Number is unique.



2.7 VGA OUTPUT(reserved)

VGA Output is optional. VGA output can connect with CRT or LCD monitor by D-SUB connector and the user can switch different resolutions and frequencies as follows.

Resolution		Frequency
VGA	640×480	56Hz
SVGA	800×600	60Hz
XGA	1024×768	70Hz
SXGA	1280×1024	75Hz

2.8 NETWORK

When the DVR is turned on, it will detect the network connection automatically. If without network connection, the network function will be disabled. Thus, please make sure the network connection before turning on the DVR.

3 SYSTEM SETUP

3.1 MENU SETUP INTERFACE(GUI)

A. CAMERA SET

B. MOTION SETUP

C. RECORD SETUP

E. HARD DISK SETUP

F. NETWORK SETUP

G. BACKUP SETUP

D. ALARM SETUP

H. SYSTEM SETUP

3.2 LIVE VIEWING AND POP-UP MENU

NOTE：The pop-up menu can be activated by moving the mouse cursor to the bottom of the live viewing screen.

A. **GUI MENU BAR**

With live viewing mode, press this button to get into the GUI menu.

B. **DISK INFORMATION**

With live viewing mode, press this button to display disk information.

C. **DIGITAL ZOOM**

In the full screen mode, right-click or left-click the mouse to zoom in or zoom out the image.

D. **AUDIO CONTROL**

Press this button to turn the audio on or off。

E. **DISPLAY CONTROL**

Within live-viewing or playback mode, use display control to switch the camera channel.

F. **RECORD AND PLAYBACK CONTROL**

Same as front panel controller and remote controller. **Please see chapter 2.1 & 4 for more detail**.

3.3 CAMERA SETUP

Press ▲ or ▼ to select items.
Press ◄ or ► to change values.
Press SET to see more options.

A. CAMERA

Press ◄ or ► to switch channels.

B. VIDEO ADJUST

B.1 CONTRAST

Press ◄ or ► to change contrast level.

B.2 BRIGHTNESS

Press ◄ or ► to change brightness level.

B3. HUE

Press ◄ or ► to change HUE level.

B4. COLOR

Press ◄ or ► to change color level.

B5. SHAPRNESS

Press ◄ or ► to change sharpness level.

C. CAMERA TITLE

Use mouse to select and change character.

D. DISPLAY

Press ◄ or ► to change value for the corresponding camera would be displayed on the screen or not.

E. AUTO SWITCH

Press ◄ or ► to ON/OFF auto switch.

3.4 MOTION SETUP

Press ▲ or ▼ to select items.
Press ◄ or ► to change values.
Press SET to see more options.

A. CAMERA
Press ◄ or ► to switch channels.

B. MOTION DETECT
Press ◄ or ► to change value for motion detect function.

C. BUZZER
Press ◄ or ► to change value for buzzer while motion detected.

D. SENSITIVITY
Press ◄ or ► to change sensitivity value from 001 (minimum) to 100 (maximum).

E. AREA SETUP
1. Press **SET** to enter motion area setting.
2. Use mouse to select which block is needed.
3. Left-Click mouse to see more options or exit the setup.

3.5 RECORD SETUP

Press ▲ or ▼ to select items.
Press ◄ or ► to change values.
Press SET to see more options.

A. RESOULTION
Press ◄ or ► to switch record resolution.
720 x 240 (NTSC)/ 720 x 288 (PAL).
360 x 240 (NTSC)/ 360 x 288 (PAL).

ATTENTION：PLEASE format the hard disk before changing the recording resolution. Different record resolution cannot be stored in the same hard disk. Failing to do so may cause data lost or hard disk damage!!

B. NORMAL RECORD PPS

Press ◄ or ► to switch PPS in normal recording.

C. ALARM RECORD PPS

Press ◄ or ► to switch PPS in alarm recording.

D. ALARM RECORD DURATION

Press ◄ or ► to set dwell time of alarm recording.

E. QUALITY

Press ◄ or ► to switch quality to LOW/ MEDIUM/ HIGH/ BEST.

F. RECORD MODE

Press ◄ or ► to switch record mode to ALWAYS/ MOTION/ SCHEDULE / OFF.

G. AUDIO RECORD

Press ◄ or ► to switch AUDIO RECORD ON or OFF.

H. SCHEDULE SETUP

Press **SET** to get into schedule setup menu。

1. Use mouse to select schedule day/ time/ mode.
2. Click to save change and exit.

3.6 ALARM SETUP

Press ▲ or ▼ to select items.
Press ◄ or ► to change values.
Press SET to see more options.

A. ALARM DISPLAY MODE
Press ◄ or ► to change value for ALARM DISPLAY MODE with full screen.

B. VIDEO LOSS DETECT
Press ◄ or ► to switch VIDEO LOSS ALARM ON or OFF.

C. EVENT LOG SETUP
Press **SET** to change value for MOTION EVENT / VIDEO LOSS EVENT to ON / OFF.

D. BUZZER TIME SETUP
Press **SET** to set dwell time of BUZZER/ ALARM.

3.7 HARD DISK SETUP

Press ▲ or ▼ to select items.
Press ◄ or ► to change values.
Press SET to see more options.

A. OVERWRITE MODE
Press ◄ or ► to change value OVERWRITE MODE ON or OFF.

B. CAPACITY WARNING
Press ◄ or ► to change value to 20/ 15/ 10 or 5% with non-overwrite mode. When LEFT RATIO is below the setting, it will enable AUDIBLE ALARM (If AUDIBLE ALARM of BUZZER of ALARM SETUP is ON).

C. HDD INFORMATION
Press SET to display HDD information.

D. HDD FORMAT SETUP

D-1. HDD PASSWORD PROTECT
Press ◄ or ► to change value for hard disk format password protection.

DC-2. HDD PASSWORD
Press **SET** then use mouse to change password.
Default password： 1111

D-3. FORMAT

Press **SET** to get into FORMAT setup.
Press YES or NO to execute.

3.8 NETWORK SETUP

Press ▲ or ▼ to select items.
Press ◄ or ► to change values.
Press SET to see more options.

A. IP MODE

Press ▲ or ▼ to select items and ◄ or ► to change to STATIC IP or DHCP.

B. HTTP PORT

Press ▲ or ▼ to select items and ◄ or ► to change WEB PAGE PORT.

C. IP ADDR

Press ▲ or ▼ to select items and ◄ or ► to change IP ADDRESS.

D. NETMASK

Press ▲ or ▼ to select items and ◄ or ► to change SUBNET MASK.

E. GATEWAY

Press ▲ or ▼ to select items and ◄ or ► to change Default GATEWAY.

F. DNS1

Press ▲ or ▼ to select items and ◄ or ► to change DNS.

G. DNS2

Press ▲ or ▼ to select items and ◄ or ► to change OTHER DNS.

H. PPPoE

H-1. PPPoE SETTING

Press◄ or ► to ENABLE / DISABLE PPPoE.

H-2. USER NAME

Use mouse to setup user name for ADSL account.

H-3 PASSWORD

Use mouse to setup password for ADSL account.

H-4 STATE

Press SET to display status of PPPoE。

I. DDNS

I-1.DDNS SETTING：Press◄ or ► to set DDNS ENABLE / DISABLE.
I-2 PROVIDER：Press◄ or ► to select DDNS provider.
I-3 USER NAME：Press **SET** to setup user name.
I-4 PASSWORD：Press **SET** to setup password.
I-5 UPDATE SCHEDULE： Use **SET** to dwell time of updating schedule.
I-6 STATE：Press SET to display status of DDNS。

3.9 BACKUP SETUP

Due to each USB device with different USB driver ICs, their compatibilities differ, too. This system is compatible with most of USB flash memory. If there is compatible issue, please refer to **APPENDIX B**. In addition, please format USB flash memory with FAT32.

BEFORE BACKUP

A. In live viewing mode, insert USB device into a USB port of the DVR.
B. Get into playback mode by PLAY TIME SEARCH or EVENT LIST SEARCH and play back videos that are going to be as backup.

VIDEO BACKUP
In multiplexer or full screen mode, press **COPY** to start backup and press **COPY** to end backup. The system will backup automatically.

BACKUP FILE NAME
Each backup file will be named as START TIME.
EXAMPLE: 11201817.IN is Nov. 6th 18:17

AFTER BACKUP
After backup, the system will copy “F4Viewer.exe” automatically on USB device for the user to play back backup file.

3.10 SYSTEM SETUP

Press ▲ or ▼ to select items.
Press ◄ or ► to change values.
Press SET to see more options.

A. DATE / TIME SETUP
Press SET to set Date / TIME.

B. SYSTEM TYPE
Please update firmware to change system type.

C. KEYBOARD LOCK
Press ◄ or ► to switch ON/ OFF.
OFF：UNLOCK.
ON： LOCK.
After KEYBOARD LOCK mode setup, please set up **PASSWORD**
Without password, un-authorized users could access into SYSTEM SETUP and make changes of settings easily.

D. ID NUMBER
Press ◄ or ► to change values.
When connecting with the joystick controller, ID NUMBER is required to make difference of each DVR.

E. DISPLAY SETUP
Press SET to ENABLE or DISABLE display of CAMERA TITLE / DVR STATUS / DATE / TIME.

F. LANGUAGE
Press ◄ or ► to change on-screen-display (OSD) language.

G. PASSWORD PROTECTION
Press ▲ or ▼ to select items and ◄ or ► to change values.

Default password: 1111.

H. FIRMWARE UPDATE

Press **YES** to start firmware update. After updated, the DVR will reboot automatically. At this moment, please do not turn off the DVR manually.

NOTE: Please format USB flash memory with FAT32.

I. LOAD DEFAULT

Press **YES** to load the system default setting, and **"LOAD DEFAULT!"** will be displayed on the screen until recover finished.

4 DVR PLAYBACK

Click the playback button on the pop-up menu.

Note: the pop-up menu can be activated by moving the mouse cursor to the bottom of the live viewing screen.

4.1 TIME SEARCH

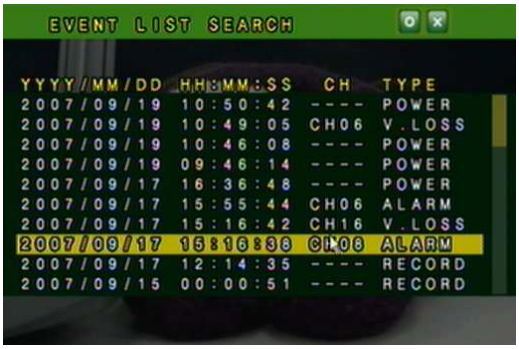
Double click mouse to trigger play time search.

Please set the start and end time to search.

4.2 EVENT SEARCH

Double click mouse to trigger event search.

Please select the event to playback。



NOTE: Display the type of the event as follows.

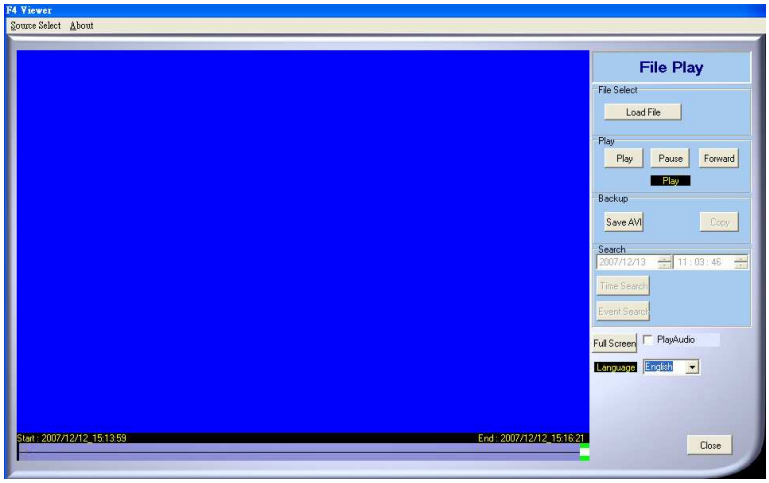
POWER	If the DVR got power loss, it will record the date and time of rebooting.
RECORD	If **REC.** button has been pressed, it will record the date and time in the event list.
V.LOSS	When a camera signal is lost, it will record the date, time, and corresponding channel.
ALARM	When ALARM is triggered, it will record the date, time, and corresponding channel.
MOTION	When MOTION is detected, it will record the date, time, and corresponding channel.

5 DVR & USB BACKUP PLAYBACK

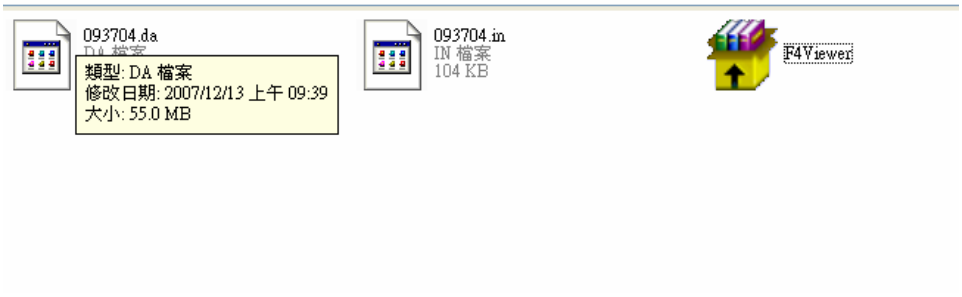
SYSTEM REQUIREMENT：
CPU: Intel Pentium III 1G or above.
MEMORY: 512 MB or above.
VGA: 32MB/64MB or above.
OS: Microsoft Windows XP SP2 or above.
VGA RESOLUTION: 1024*768 or above.

5.1 MAIN SCREEN SETTING

A. MAIN SCREEN

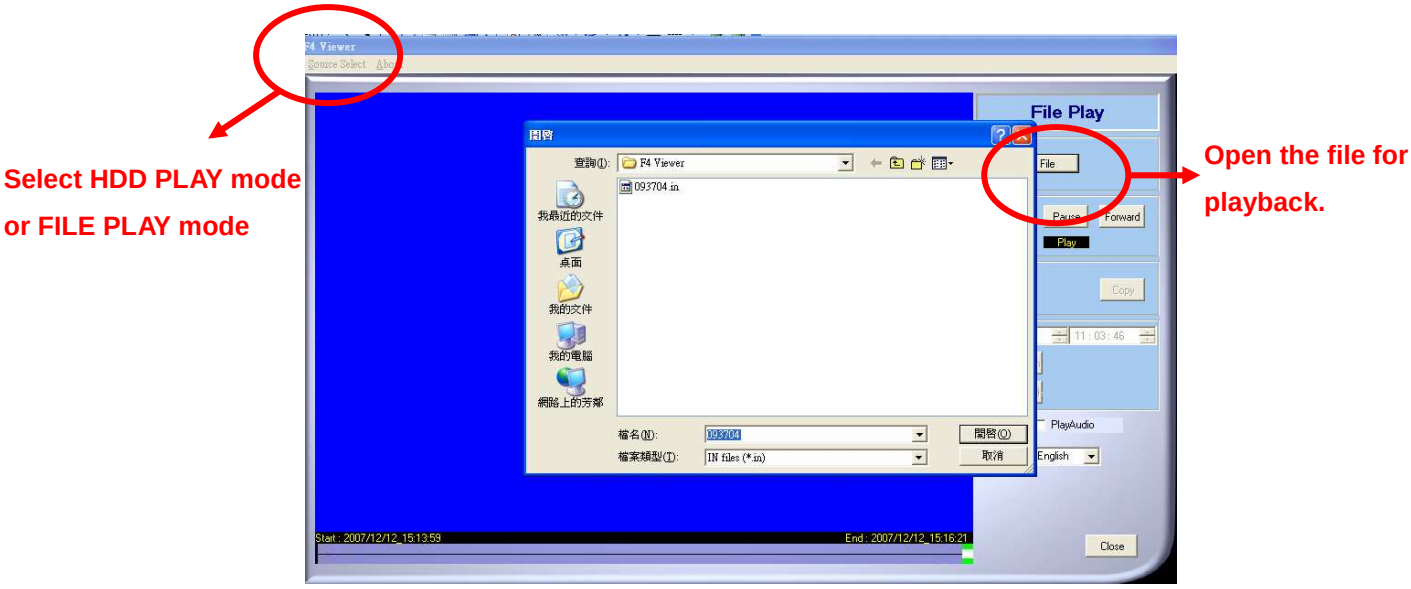


B. Open a disk drive that is with USB Backup files (e.g. F:) or other folder that is with Backup files.

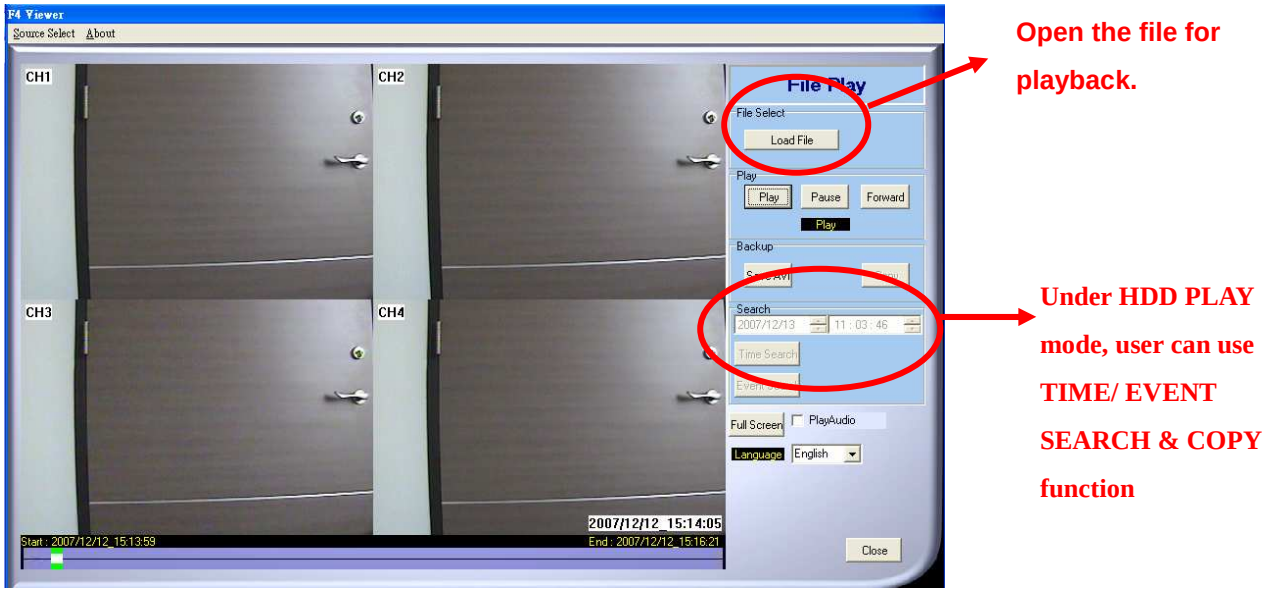


Each backup file will be named as START TIME.
EXAMPLE: 11201817.IN is Nov. 6th 18:17

C. Select HDD PLAY mode or FILE PLAY mode, and then open the file for playback.

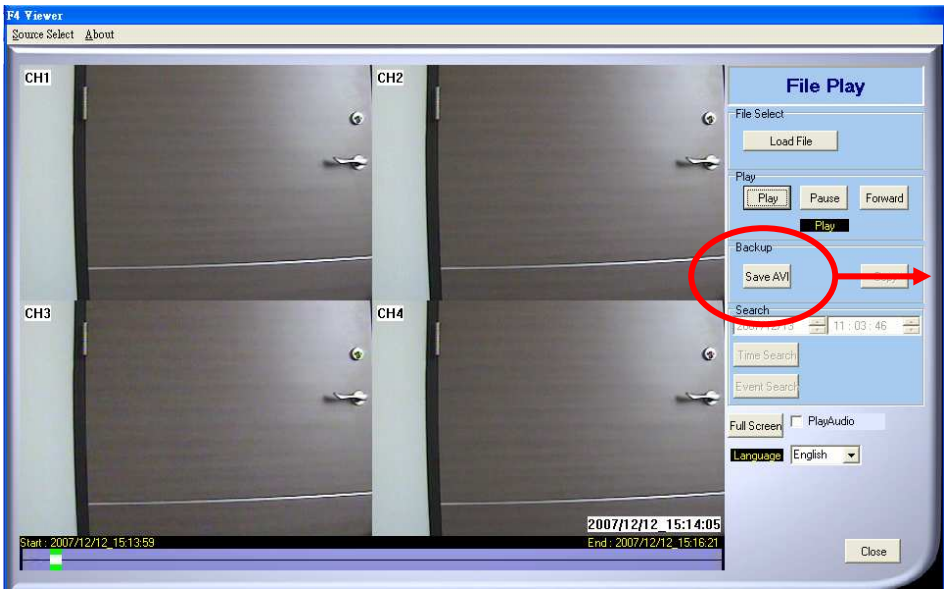


5.2 PLAYER USER INTERFACE



5.3 AVI BACKUP & SNAPSHOT

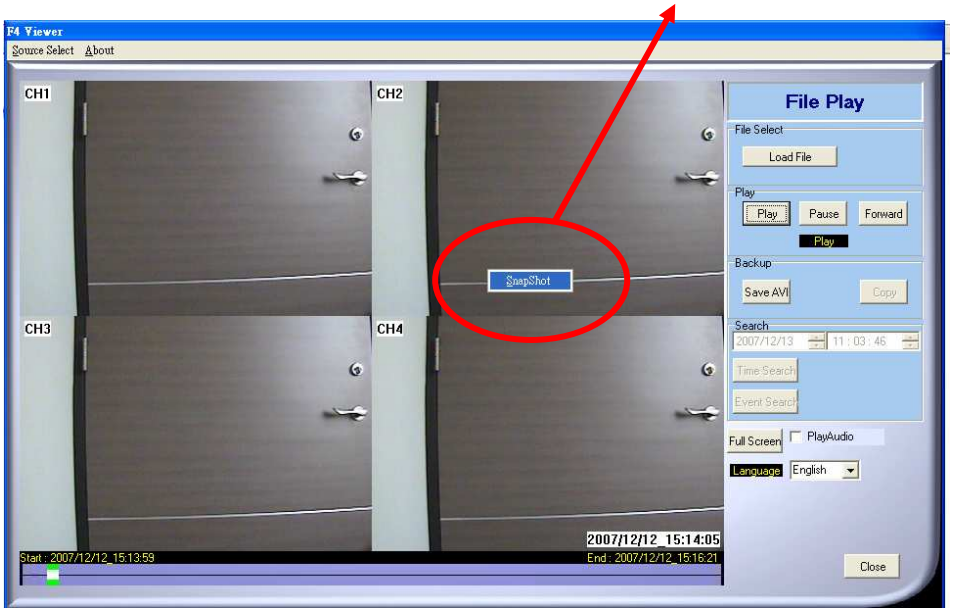
A. AVI BACKUP



User can save the playing video file as AVI format

B. SNAPSHOT

Click on the left of mouse to use SNAPSHOT function



6 NETWORK VIEWING & PLAYBACK

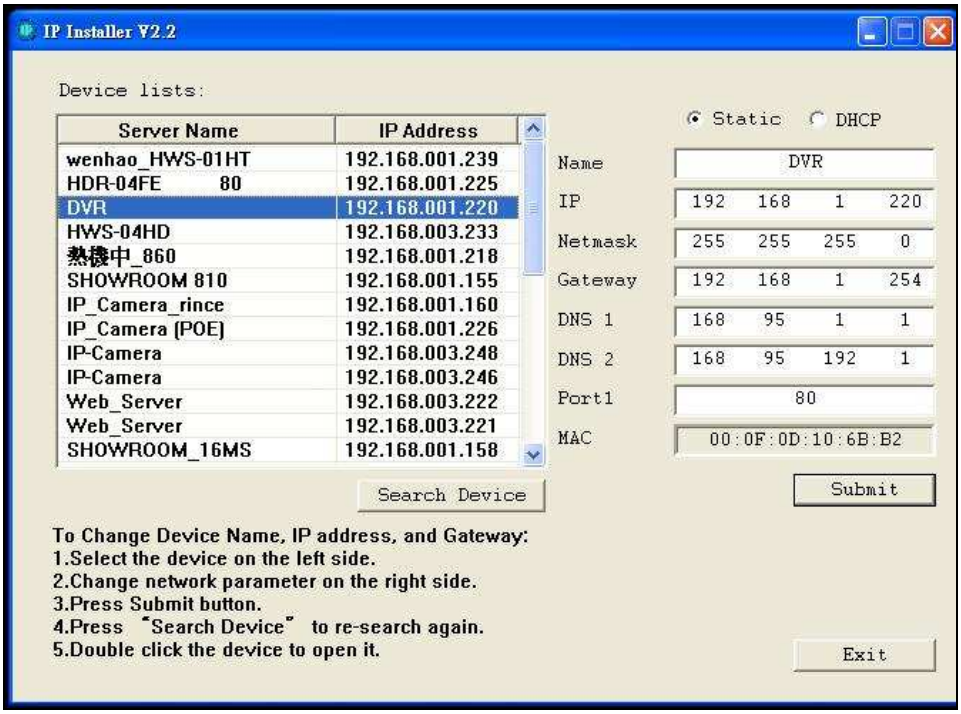
CPU: Intel Pentium III 1G or above.
Memory: 512 MB or above.
VGA: 32MB/64MB or above.
OS: Microsoft Windows XP SP2 or above.
VGA RESOLUTION: 1024*768 or above.

6.1 IP ADDRESS SETUP ON PC SITE

Install cameras inside in LAN or use network cable to connect with PC. This is for IPInstallerEng.exe to set up IP address of cameras. If OS is Windows XP SP2 or above, the following Windows Security Alert will popup. Then, please click on **Unblock**.

Windows Security Alert
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name: IPInstaller V2.0 IPCam Scan
Publisher: Unknown
Keep Blocking
Unblock
Ask Me Later
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. When should I unblock a program?

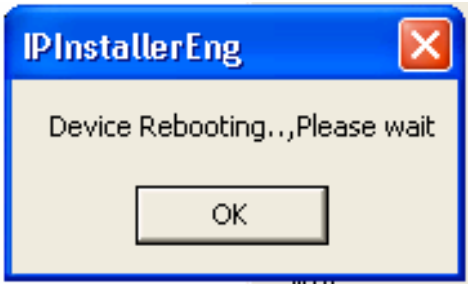
Then, IPInstallerEng.exe will popup:
DVR default IP address is 192.168.1.220



NOTE: Please input correct network parameters without blank spaces.

On Device Lists, it lists all servers. Click on one server and then its IP setting will show on the right side. After editing the parameters and clicking on Submit, the following dialogue box will popup. And, it will reboot the device with new

parameters.



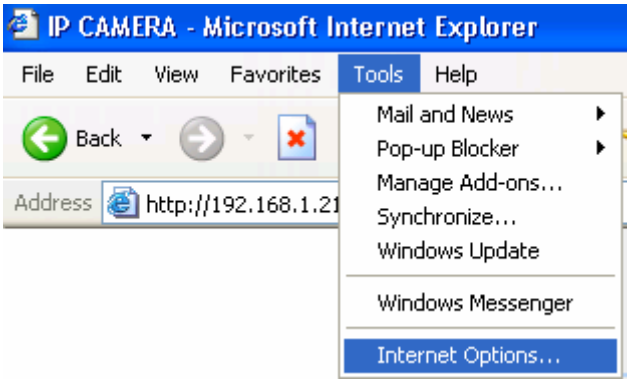
6.2 OPTIONAL MICROSOFT INTERNET EXPLORER SETUP:

OPTION 1: DISABLE ACTIVEX WARNING

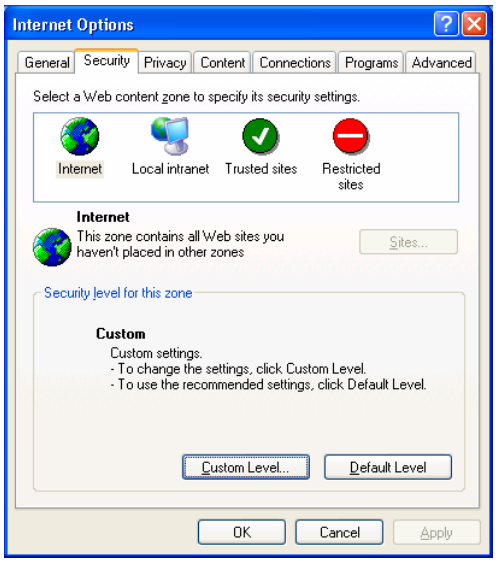
A. IE → Tools → Internet Options → Security → Custom Level → Security Settings → Download unsigned ActiveX controls → Enable or Prompt (recommend).

B. IE → Tools → Internet Options → Security → Custom Level → Security Settings → Initialize and script ActiveX controls not marked as safe → Enable or Prompt (recommend).

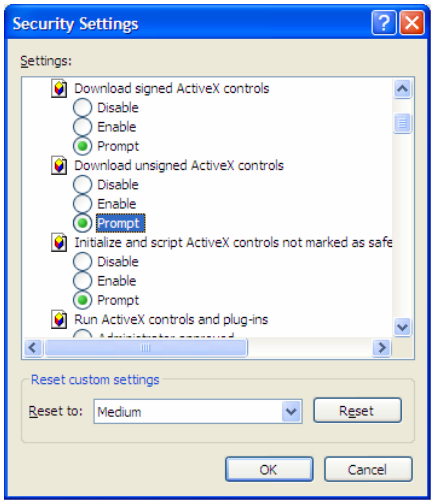
1



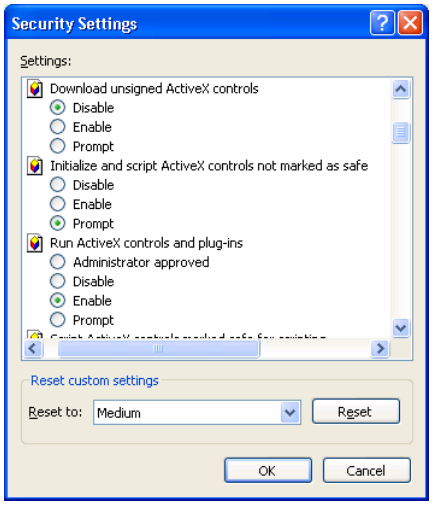
2



3

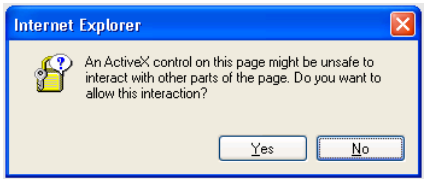


4



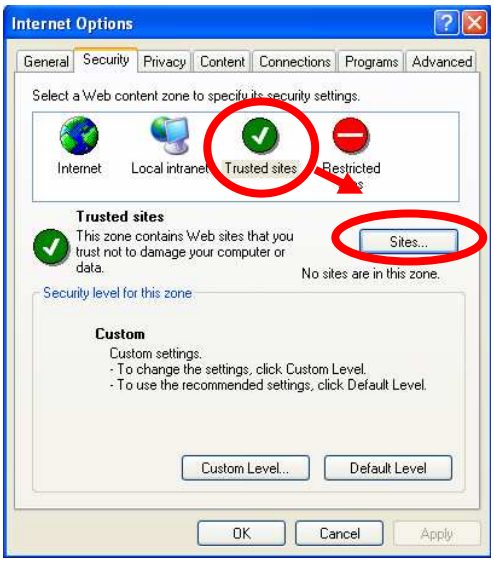
Above three options are all based on select as the prompt.

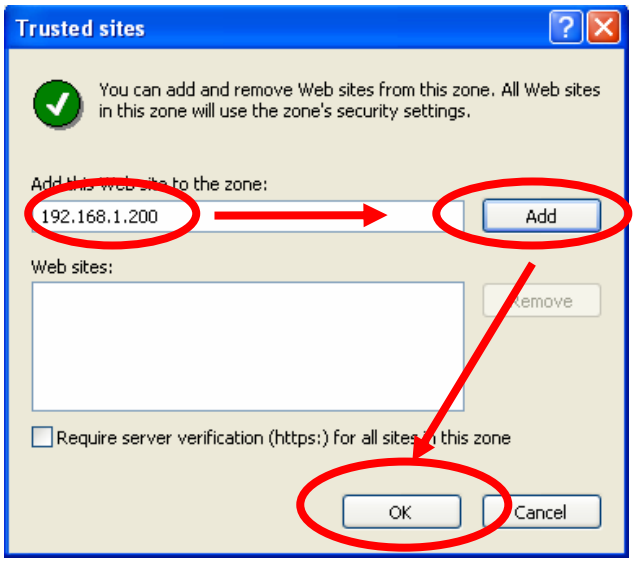
As indicated in the dialogue box. Please select "YES."


Internet Explorer
An ActiveX control on this page might be unsafe to interact with other parts of the page. Do you want to allow this interaction?
Yes
No

OPTION 2: ADD TO TRUSTED SITES

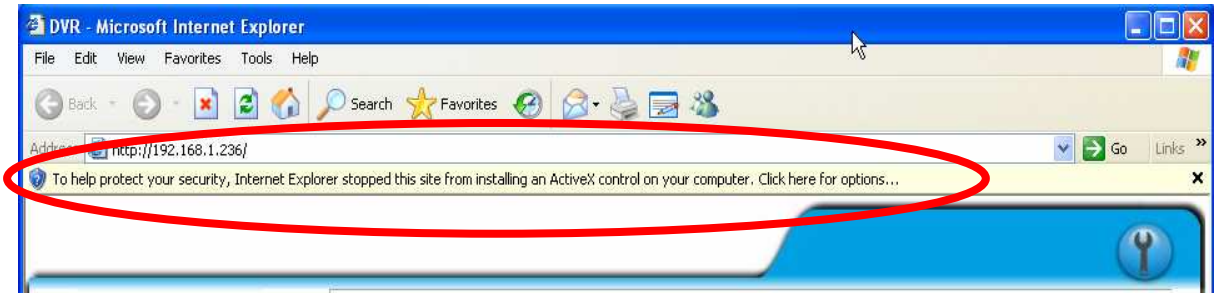
IE → Tools → Internet Options → Security → Trusted sites → Sites



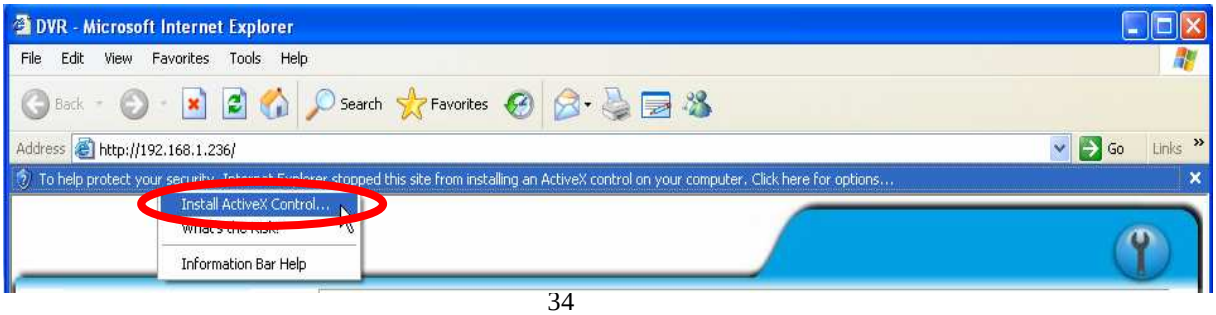

Trusted sites
You can add and remove Web sites from this zone. All Web sites in this zone will use the zone's security settings.
Add this Web site to the zone:
192.168.1.200
Add
Web sites:
Remove
Require server verification (https:) for all sites in this zone
OK
Cancel

6.3 LOGIN

A. INSTALL ACTIVEX


DVR - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://192.168.1.236/
Go Links
To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...

B. START INSTALL ACTIVEX


DVR - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://192.168.1.236/
Go Links
To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...
Install ActiveX Control...
Information Bar Help

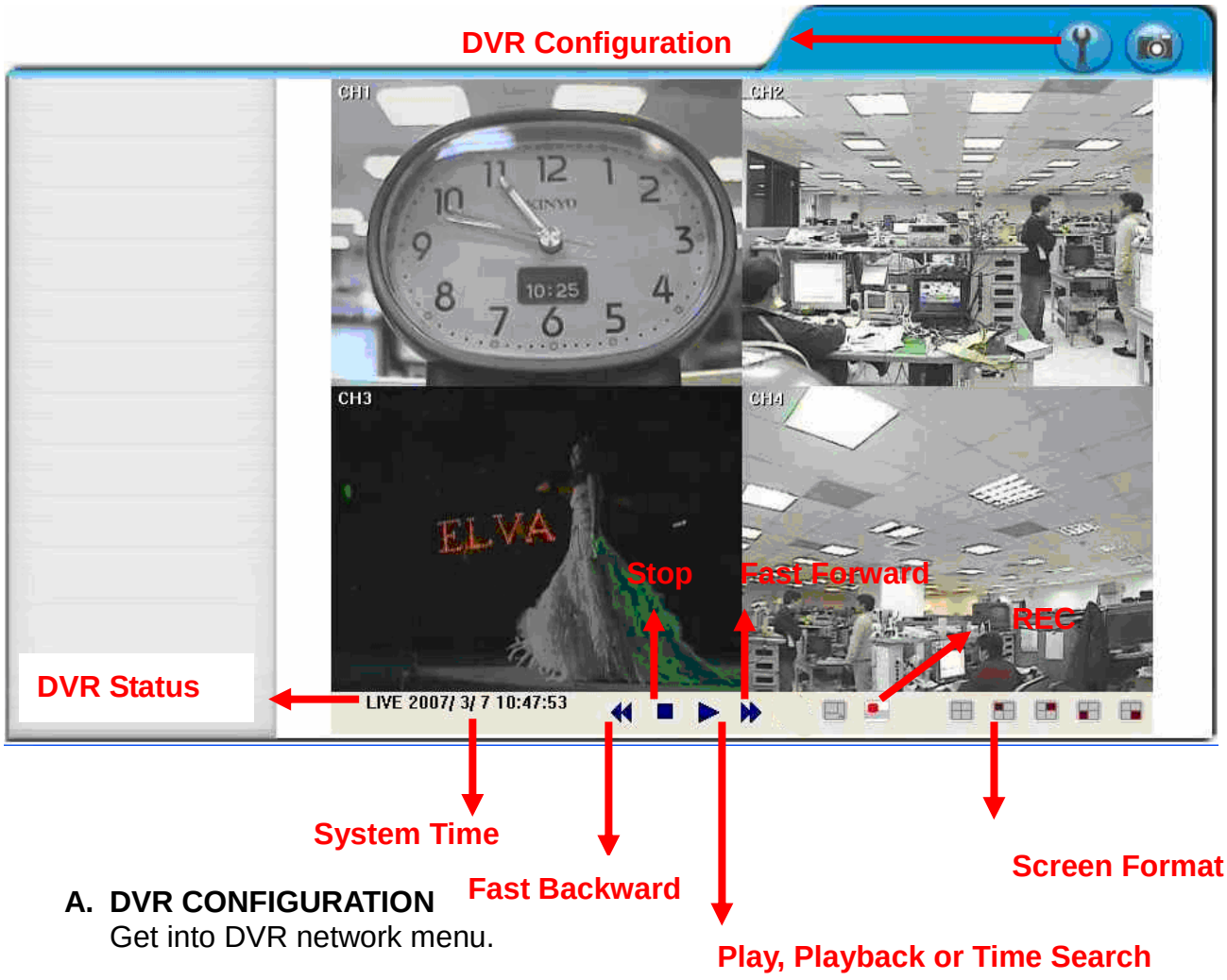
C. ACCOUNT & PASSWORD LOGIN

After IP setup and connect to network or LAN, type IP address on IE Browser directly. The following User name & Password Login window will popup.

Default user name: admin

Default password: admin

6.4 LIVE VIEWING



A. DVR CONFIGURATION

Get into DVR network menu.

B. SYSTEM TIME

Live viewing mode: The current live viewing time.

C. SCREEN FORMAT

Switch screen format and click twice to switch different channels with full screen.

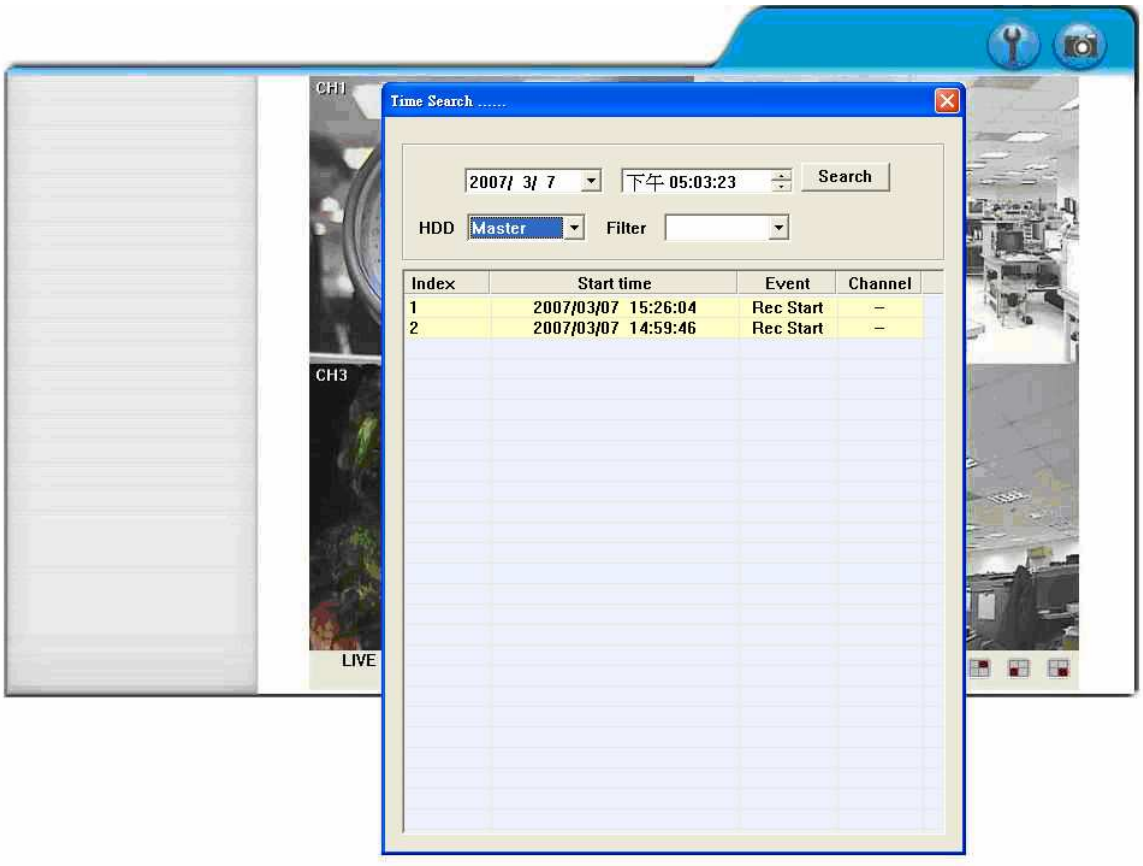
D. **Snapshot.**

E. **Full Screen.** Click again to return.

F. **REC.** Videos are saved as AVI file.

G. **Playback Time Search.**

Click , the following Time Search….. window will popup.



- **EVENT LIST**
  Select a HDD to list EVENT LIST on Master or Slave HDD. Click the left button of the mouse twice to play back the selected event.

- **TIME SEARCH**
  Input Date and Time and click Search to play back.

6.5 CONFIGURE

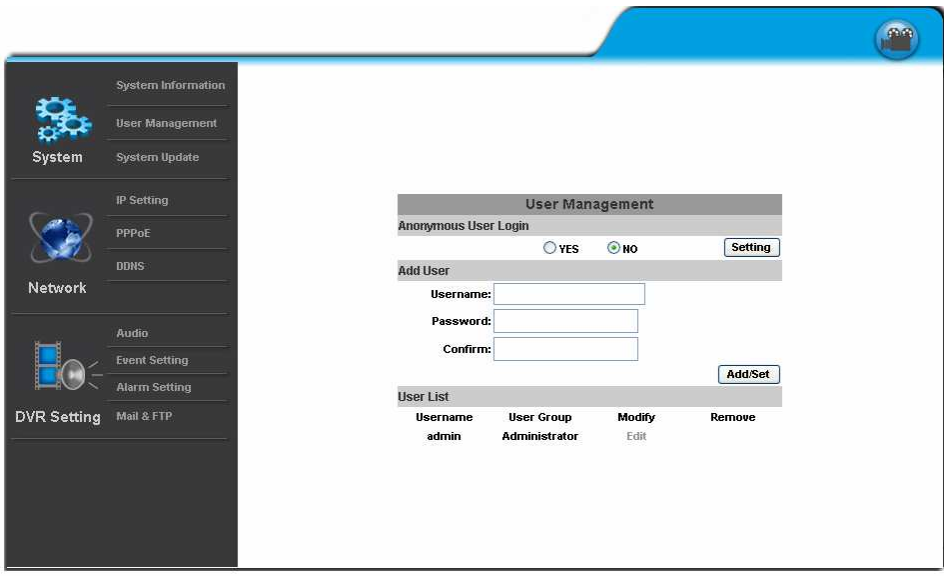
A. System - System Information

A-1 SYSTEM INFORMATION

SERVER NAME: This name will show on the IP Installer.

LANUGAGE：There are English, Traditional Chinese, and Simplified Chinese. After selecting one language, the following dialogue box will popup and ask the user to confirm.

B. SYSTEM – USER MANAGEMENT



User Management provides 3 levels of limits of authority: Administrator (the

highest), User, and Anonymous.
Default administrator account: Username: admin Password: admin

B-1 ANONYMOUS USER LOGIN:

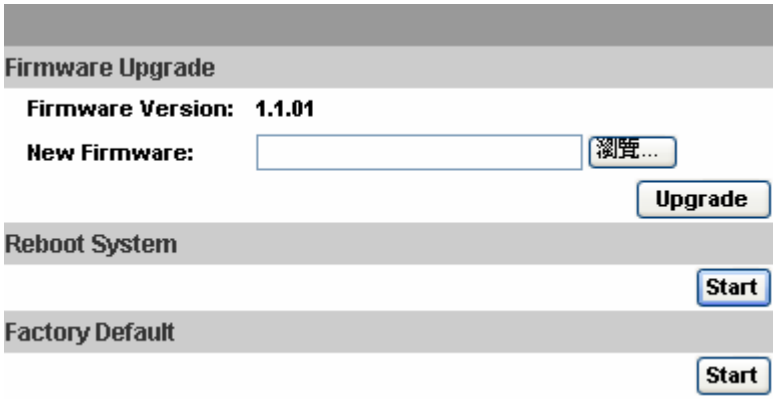
YES: Accept anonymous user login without password as guest login.
NO: Anonymous login unacceptable.

B-2 USER MANAGEMENT:

Add: Input Username and Password and then click on **Add/Set** to save.
Modify: Click on selected User name on User List and the following window will popup. After inputting Password and Confirm Password, click on **OK**.

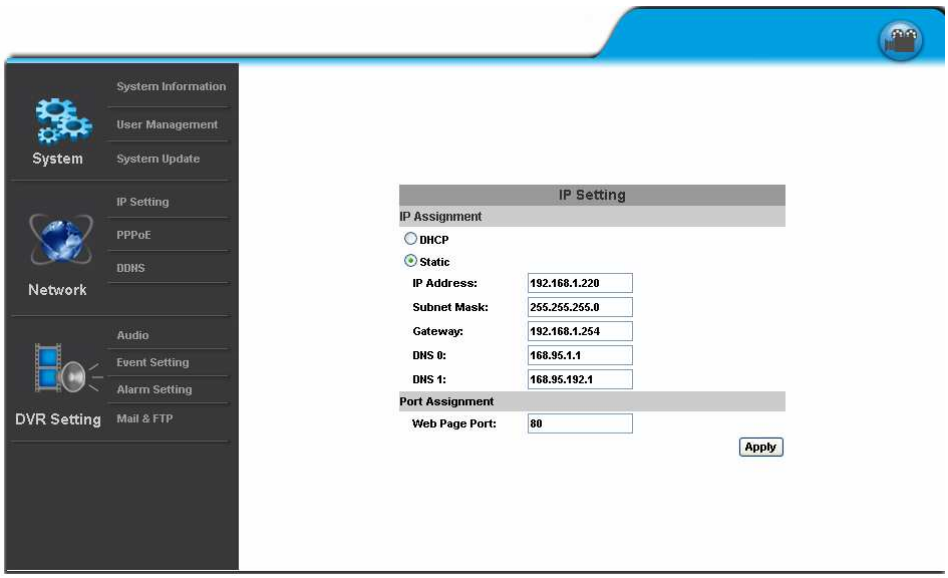
Remove: Click on selected User name on the user list and click on **Remove**.

C. NETWORK – IP SETTING



Click browse to select firmware to upgrade
Click start to reboot the DVR.

D. NETWORK – IP SETTING



D-1 IP ASSIGNMENT

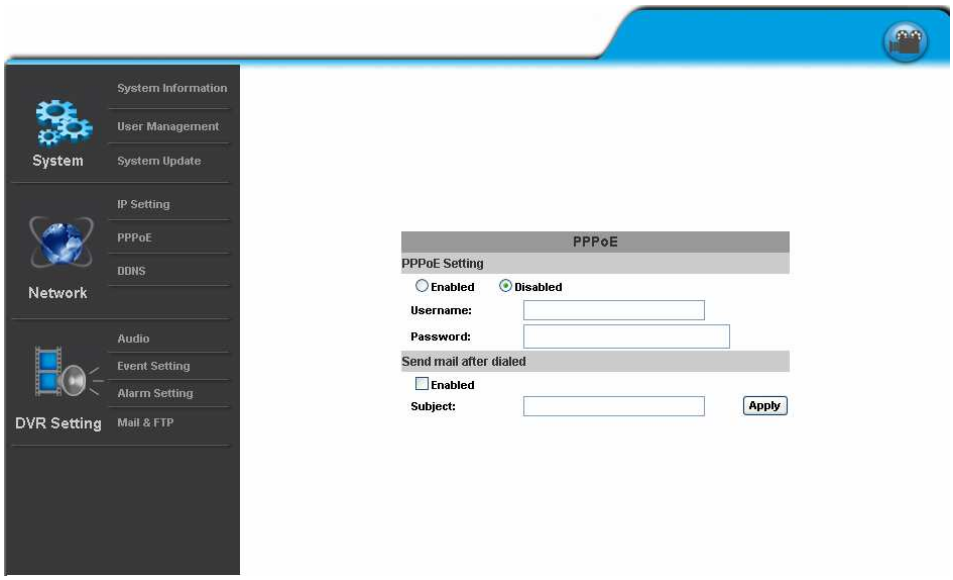
DHCP: In Dynamic Host Configuration Protocol (DHCP) mode, DHCP server will get setting done automatically.

STATIC IP: Please input IP address, Subnet Mask, and Gateway based on network environment.

D-2 PORT ASSIGNEMENT

With IP Share (Router), the following Ports needed to be adjusted in case of conflict.

E. NETWORK – PPPoE



E-1 PPPoE SETTING

Click on Enabled to enable ADSL dial function.

Username: Username for ADSL account.

Password: Password for ADSL account.

After dialed successfully, new IP address will appear.

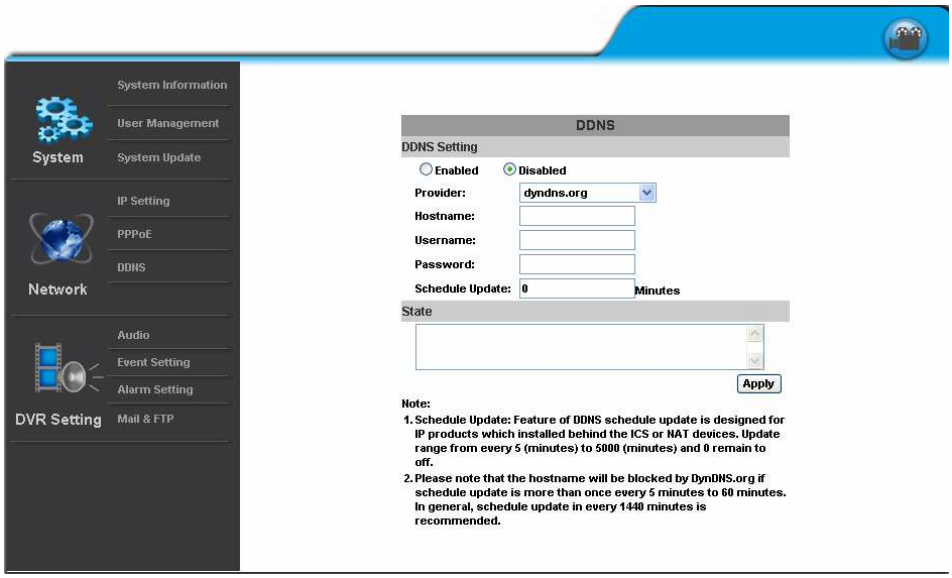
E-2 SEND MAIL AFTER DIALED

Click on Enabled to enable SEND MAIL AFTER DIALED function.

E-3 SUBJECT

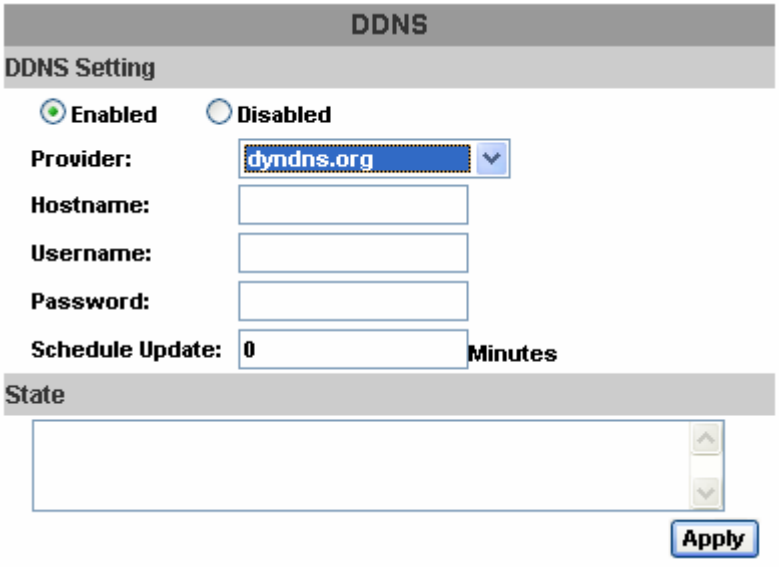
Mail subject.

F. NETWORK / DDNS SETTING



Click on Enabled to enable DDNS function.

F-1 DYNDNS.ORG



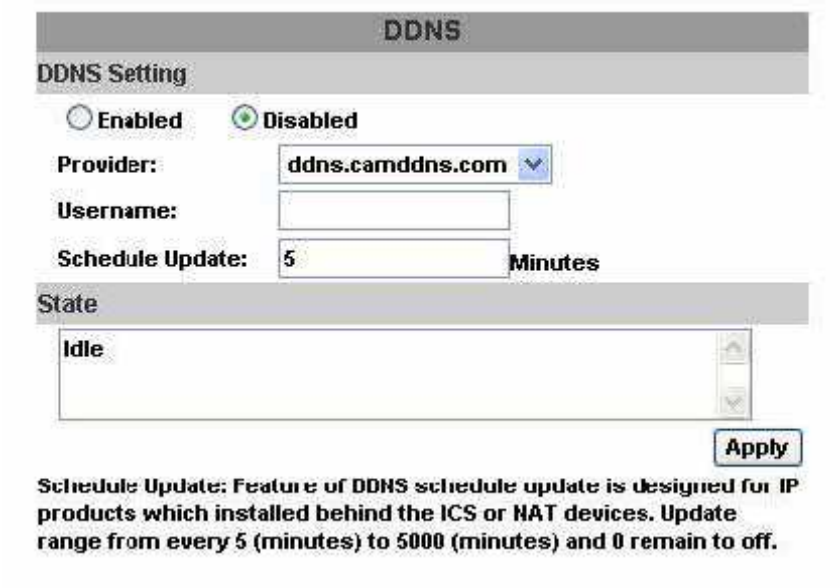
DDNS SETTING - DYNDNS.ORG

PROVIDER: Select dyndns.org
HOSTNAME: The registered hostname in DYNDNS.ORG.
USERNAME: The registered username in DYNDNS.ORG.
PASSWORD: The registered password in DYNDNS.ORG.
SCHEDULE UPDATE: A period of time to update IP address.

STATE

1. Updating: Information update.
2. Idle: Stop service.
3. DDNS registered successfully, now log by http://<username>.ddns.camddns.com: Registered successfully.
4. Updating Failed, the name is already registered.
5. Updating Failed, please check your internet connection.

F-2 DDNS.CAMNNDS.COM



DDNS SETTING – DDNS.CAMDDNS.COM

PROVIDER: Select ddns.camddns.com
USERNAME: The registered username in DDNS.CAMDDNS.COM.
SCHEDULE UPDATE: A period of time to update IP address.

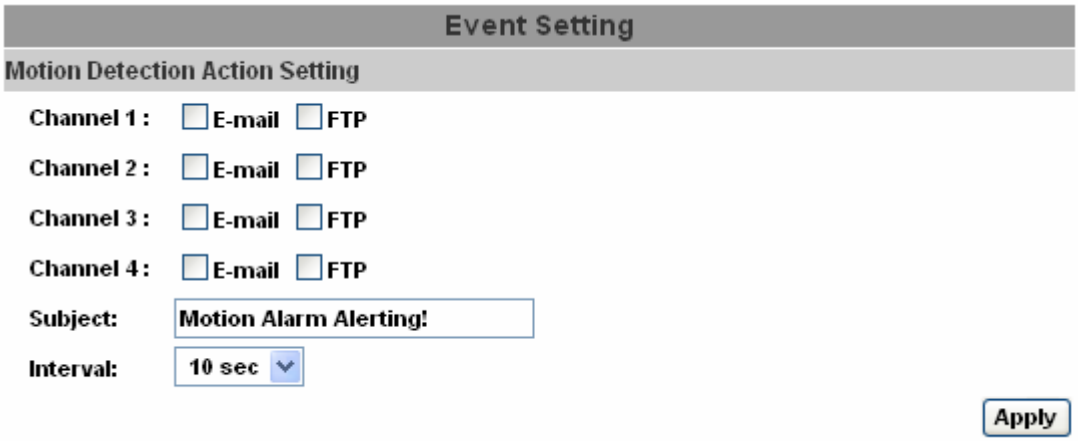
STATE

1. Updating: Information update.
2. Idle: Stop service.
3. DDNS registered successfully, now log by http://<username>.ddns.camddns.com: Registered successfully.
4. Updating Failed, the name is already registered.
5. Updating Failed, please check your internet connection.

G. AUDIO SETING

Enabled: Enable the audio transmission from DVR to PC.
Disabled: Disable the audio transmission from DVR to PC.

H. EVENT SETTING



H-1 MOTION DECTECTION ACTION SETTING

Motion detection action can be set up on each channel individually. After the motion is detected, it will trigger emails or upload files to FTP.

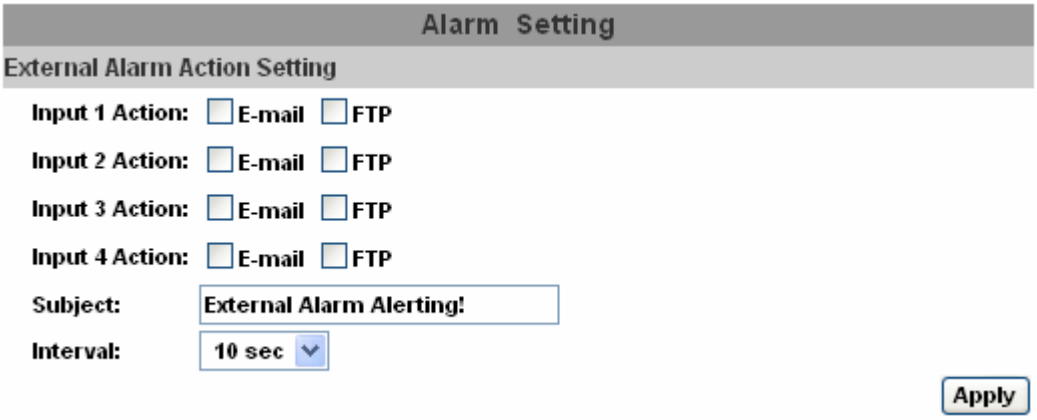
H-2 SUBJECT

Mail Subject.

H-3 INTERVAL

The interval time between two emails in case the mail is sent out too frequently.

I. EVENT SETTING/ ALARM SETTING



I-1 EXTERNAL ALARM ACTION SETTING

External alarm action can be set up on each channel individually. After the external alarm action is detected, it will trigger emails or upload files to FTP.

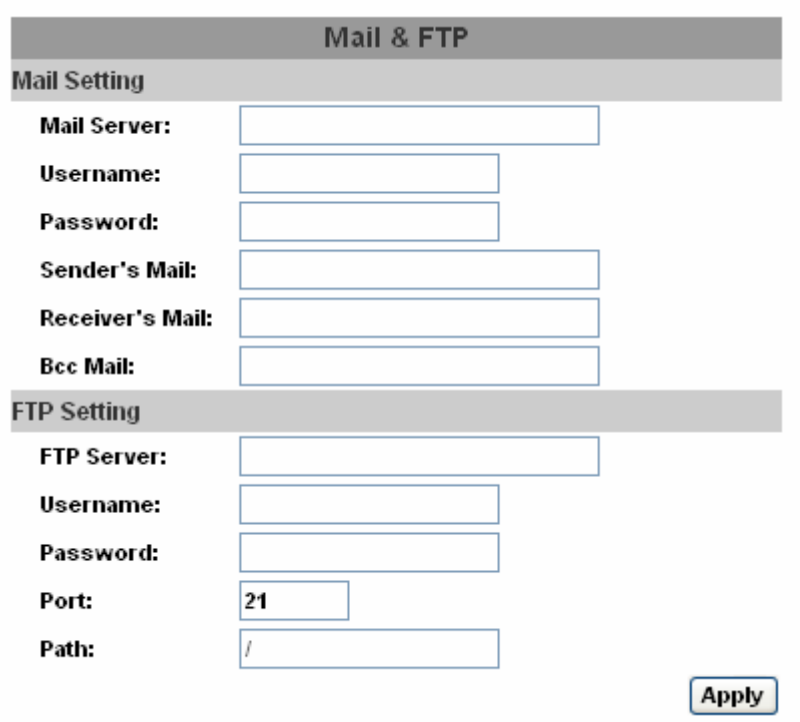
I-2 SUBJECT

Mail Subject.

I-3 INTERVAL

The interval time between two emails in case the mail is sent out too frequently.

J. EVENT SETTING/ MAIL & FTP



J-1 MAIL & FTP SETTING

Mail and FTP settings are for motion detection action and external alarm action. When both actions are detected, it will trigger emails or upload files to FTP.

APPENDIX A: RECORDING TIME LAPSE

NTSC

80GB HDD								
PPS (Picture Per Sec.)		30	15	10	5	3	2	1
Record Quality	Best	93 hr	186 hr	279 hr	558 hr	930 hr	1395 hr	2790 hr
	High	125 hr	250 hr	375 hr	750 hr	1250 hr	1875 hr	3750 hr
	Middle	186 hr	372 hr	558 hr	1116 hr	1860 hr	2790 hr	5580 hr
	Low	373 hr	746 hr	1119 hr	2238 hr	3730 hr	5595 hr	11190 hr
120GB HDD								
PPS (Picture Per Sec.)		30	15	10	5	3	2	1
Record Quality	Best	140 hr	279 hr	419 hr	837 hr	1395 hr	2093 hr	4185 hr
	High	188 hr	376 hr	564 hr	1128 hr	1880 hr	2820 hr	5640 hr
	Middle	275 hr	559 hr	837 hr	1674 hr	2790 hr	4185 hr	8370 hr
	Low	560 hr	1119 hr	1679 hr	3357 hr	5595 hr	8393 hr	16785 hr
160GB HDD								
PPS (Picture Per Sec.)		30	15	10	5	3	2	1
Record Quality	Best	186 hr	372 hr	558 hr	1116 hr	1860 hr	2790 hr	5580 hr
	High	250 hr	500 hr	750 hr	1500 hr	2500 hr	3750 hr	7500 hr
	Middle	372 hr	744 hr	1488 hr	2232 hr	3720 hr	5580 hr	11160 hr
	Low	746 hr	1492 hr	2984 hr	4476 hr	7460 hr	11190 hr	22380 hr
250GB HDD								
PPS (Picture Per Sec.)		30	15	10	5	3	2	1
Record Quality	Best	279 hr	558 hr	837 hr	1674 hr	2790 hr	4185 hr	8370 hr
	High	375 hr	750 hr	1125 hr	2250 hr	3750 hr	5625 hr	11250 hr
	Middle	558 hr	1116 hr	1674 hr	3348 hr	5580 hr	8370 hr	16740 hr
	Low	1119 hr	2238 hr	3357 hr	6714 hr	11190 hr	16785 hr	33570 hr
300GB HDD								
PPS (Picture Per Sec.)		30	15	10	5	3	2	1
Record Quality	Best	372 hr	744 hr	1116 hr	2232 hr	3720 hr	5580 hr	11160 hr
	High	500 hr	1000 hr	1500 hr	3000 hr	5000 hr	7500 hr	15000 hr
	Middle	744 hr	1488 hr	2232 hr	4464 hr	7440 hr	11160 hr	22320 hr
	Low	1492 hr	2984 hr	4476 hr	8952 hr	14920 hr	22380 hr	44760 hr
400GB HDD								
PPS (Picture Per Sec.)		30	15	10	5	3	2	1
Record Quality	Best	465 hr	930 hr	1395 hr	2790 hr	4650 hr	6975 hr	13950 hr
	High	625 hr	1250 hr	1875 hr	3750 hr	6250 hr	9375 hr	18750 hr
	Middle	930 hr	1860 hr	2790 hr	5580 hr	9300 hr	13950 hr	27900 hr
	Low	1865 hr	3730 hr	5595 hr	11190 hr	18650 hr	27975 hr	55950 hr
500GB HDD								
PPS (Picture Per Sec.)		30	15	10	5	3	2	1
Record Quality	Best	558 hr	1116 hr	1674 hr	3348 hr	5580 hr	8370 hr	16740 hr
	High	750 hr	1500 hr	2250 hr	4500 hr	7500 hr	11250 hr	22500 hr
	Middle	1116 hr	2232 hr	3348 hr	6696 hr	11160 hr	16740 hr	33480 hr
	Low	2238 hr	4476 hr	6714 hr	13428 hr	22380 hr	33570 hr	67140 hr

PAL

80GB HDD								
PPS (Picture Per Sec.)		25	12	10	5	3	2	1
Record Quality	Best	112 hr	223 hr	279 hr	558 hr	930 hr	1395 hr	2790 hr
	High	167 hr	334 hr	418 hr	835 hr	1336 hr	2005 hr	4175 hr
	Middle	223 hr	447 hr	558 hr	1116 hr	1860 hr	2790 hr	5580 hr
	Low	448 hr	896 hr	1119 hr	2238 hr	3730 hr	5595 hr	11190 hr
120GB HDD								
PPS (Picture Per Sec.)		25	12	10	5	3	2	1
Record Quality	Best	168 hr	335 hr	419 hr	837 hr	1395 hr	2093 hr	4185 hr
	High	251 hr	502 hr	628 hr	1255 hr	2008 hr	3012 hr	6275 hr
	Middle	330 hr	671 hr	837 hr	1674 hr	2790 hr	4185 hr	8370 hr
	Low	672 hr	1343 hr	1679 hr	3357 hr	5595 hr	8393 hr	16785 hr
160GB HDD								
PPS (Picture Per Sec.)		25	12	10	5	3	2	1
Record Quality	Best	149 hr	447 hr	744 hr	1116 hr	1860 hr	2790 hr	5580 hr
	High	334 hr	668 hr	835 hr	1670 hr	2672 hr	4008 hr	8350 hr
	Middle	447 hr	893 hr	1488 hr	2232 hr	3720 hr	5580 hr	11160 hr
	Low	895 hr	1791 hr	2984 hr	4476 hr	7460 hr	11190 hr	22380 hr
250GB HDD								
PPS (Picture Per Sec.)		25	12	10	5	3	2	1
Record Quality	Best	335 hr	670 hr	837 hr	1674 hr	2790 hr	4185 hr	8370 hr
	High	501 hr	1002 hr	1253 hr	2505 hr	4008 hr	6012 hr	12525 hr
	Middle	670 hr	1340 hr	1674 hr	3348 hr	5580 hr	8370 hr	16740 hr
	Low	1343 hr	2686 hr	3357 hr	6714 hr	11190 hr	16785 hr	33570 hr
300GB HDD								
PPS (Picture Per Sec.)		25	12	10	5	3	2	1
Record Quality	Best	447 hr	893 hr	1116 hr	2232 hr	3720 hr	5580 hr	11160 hr
	High	668 hr	1336 hr	1670 hr	3340 hr	5344 hr	8016 hr	16700 hr
	Middle	893 hr	1786 hr	2232 hr	4464 hr	7440 hr	11160 hr	22320 hr
	Low	1791 hr	3581 hr	4476 hr	8952 hr	14920 hr	22380 hr	44760 hr
400GB HDD								
PPS (Picture Per Sec.)		25	12	10	5	3	2	1
Record Quality	Best	558 hr	1116 hr	1395 hr	2790 hr	4650 hr	6975 hr	13950 hr
	High	835 hr	1670 hr	2088 hr	4175 hr	6680 hr	10020 hr	20875 hr
	Middle	1116 hr	2232 hr	2790 hr	5580 hr	9300 hr	13950 hr	27900 hr
	Low	2238 hr	4476 hr	5595 hr	11190 hr	18650 hr	27975 hr	55950 hr
500GB HDD								
PPS (Picture Per Sec.)		25	12	10	5	3	2	1
Record Quality	Best	670 hr	1340 hr	1674 hr	3348 hr	5580 hr	8370 hr	16740 hr
	High	1002 hr	2004 hr	2505 hr	5010 hr	8016 hr	12024 hr	25050 hr
	Middle	1340 hr	2678 hr	3348 hr	6696 hr	11160 hr	16740 hr	33480 hr
	Low	2686 hr	5371 hr	6714 hr	13428 hr	22380 hr	33570 hr	67140 hr

APPENDIX B: HDD/ USB DRIVE COMPATIBLE TABLE

HDD COMPATIBLE TABLE

Brand	Model	Capacity	Speed(RPM)
SEAGATE	ST380815AS	80G	7200 10
SEAGATE	ST3160815AS	160G	7200 10
SEAGATE	ST3250620AS	250G	7200 10
SEAGATE	ST3400620AS	400G	7200 10
SEAGATE	ST3750640AS	750G	7200 10
MAXTOR	STM3250820AS	250G	7200
MAXTOR	STM3250824AS	250G	7200
WD	WD800AAJS-00PSA0	80G	7200
WD	WD2500AAKS-00SBA0	250G	7200
WD	WD4000YS-01MPB1	400G	7200
HITACHI	HDS728080PLA380	82.3G	7200
HITACHI	HDS721616PLA380	164G	7200
HITACHI	HDT725032VLA360	320G	7200

USB DRIVE COMPATIBLE TABLE

Brand	Model	Capacity
Kingston	DataTraveler II+	512MB
Kingston	DataTraveler II+	1GB
Transcend	TS128MJFLASHA	128MB
Transcend	JetFlash 110	512MB
Transcend	JetFlash 110	1GB

ATTENTION: DO NOT use SanDisk Cruzer® Microc series for USB Backup.

APPENDIX C: HARD DISK INSTALLATION

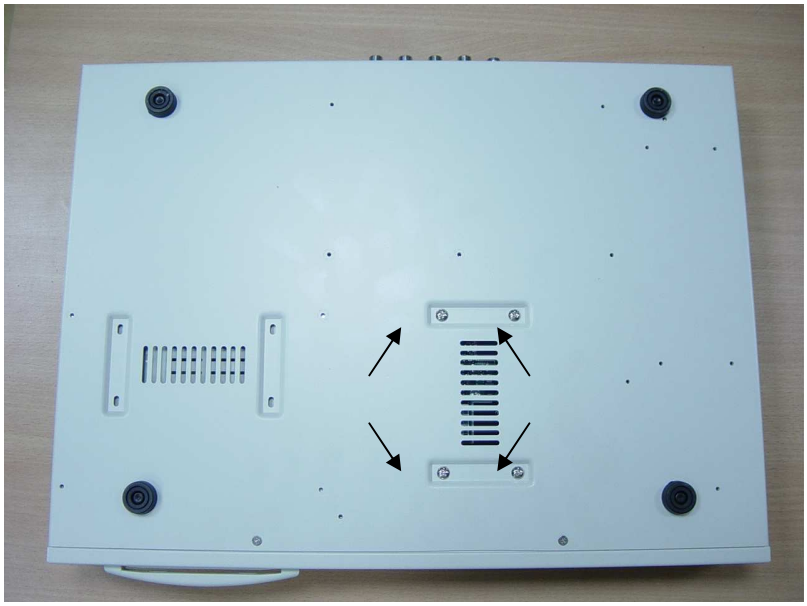
1. Hard drive jumpers need to be set properly in order to make DVR function correctly.

2. Remove DVR top cover by taking out screws from location shown below:

3. Below picture indicates a DVR without a H.D.D installed.

4. Please refer to the instruction from hard drive manufactory for correct jumper setting on (master) mode of the hard drive, mounting the hard drive over DVR base by facing SATA interface to DVR main board. Match screw holes from bottom to bottom of hard drive and the DVR. Turn over the DVR from top to bottom side and then mounting up the hard drive by using screws from

attached accessory pack as picture below:



5. Hooking up SATA cable and power cable to the hard drive as picture below.

6. Restores top cover then hook up with power and monitor a hard drive status message appearing if it's been installed successful.

Attentions：

1. Hard drive master mode must be set correctly.
2. Make sure power cable is unplugged before hard drive installation starts.
3. SATA cable and power cable must be hooking up correctly.